

AMENDMENTS TO THE SPECIFICATION

In the specification, please insert the following at page 5, line 5:

FIGURES

The following drawings form part of the present specification and are included to further demonstrate certain aspects of the present invention. The invention may be better understood by reference to one or more of these drawings in combination with the detailed description of specific embodiments presented herein.

FIGS. 1A-D. Mononuclear cord blood cells were stained with labeled antibodies (anti CD45, anti CD71 and the antibody under investigation, 4B9) and a DNA dye. Antibody binding was measured with a flow cytometer. (FIG. 1A) This figure shows a diagram with the light scatter properties of erythroid precursor cells. For further characterization, the cells characterized by means of their light scatter properties in region R1 were used. (FIG. 1B) This figure shows a diagram of fluorescence properties of the cells in region R1 and labeled with CD71-antibody and dye LDS751 labeling all nuclei. Region R2 encloses nucleated cells which express or do not express CD71 antigen. (FIG. 1C) This figure shows a diagram of fluorescence properties of the cells in region R2 incubated with CD71 antibodies and CD45 antibodies. The cells in region R3 express CD71 antigen but not CD45 antigen. This diagram demonstrates the differentiation between CD71 positive nucleated erythroid cells (Region R3) and CD45 positive leukocytes. (FIG. 1D) This figure shows a diagram of fluorescence properties of the cells in region R2. The cells in region R4 express CD71 antigen and bind to the 4B9 antibody. Thus, antibody 4B9 binds preferentially to CD71 positive cells, which are CD45 negative.

FIG. 2 discloses absorption of monoclonal antibodies 4B8 and 4B9 with adult erythrocytes, followed by the determination of their binding capability on cord blood cells. It is shown that neither 4B8 antibody nor 4B9 antibody is absorbed by adult red blood cells. For positive and negative controls antibodies against CD71 and glycophorin A were used.

FIGS. 3A-B. Flow cytometric investigation of the binding of the monoclonal antibodies 4B8 and 4B9 on cord blood cells and adult blood cells (x-axis: fluorescence intensity). (FIG. 3A)

This histogram shows unstained, negative cord blood cells marked as “unlabeled” and cord blood cells incubated with labeled antibodies 4B8 (marked as 4B8) and 4B9 (marked as 4B9). This demonstrates that cord blood cells are stained by antibodies 4B8 and 4B9. (FIG. 3B) In this figure, adult blood cells show the same fluorescence intensity (x-axes), whether they are incubated with antibodies 4B8 ("4B8") or 4B9 ("4B9") or with no antibody ("unlabeled"). Thus, antibodies 4B8 and 4B9 do not bind to adult blood cells.

FIGS. 4A1-B2. Immunofluorescent and immunoenzymatic analyses of fetal blood cells. (FIGS. 4A-B) Glycophorin A-positive (marked with "G") fetal erythropoietic cells express the 4B9 antigen (fluorescent, filled black regions in the cells schematically drawn in FIG. 4B). Cell nuclei are stained with DAPI and marked with "B". Obviously, nucleated and enucleated red blood cells are positive for the 4B9 antigen. FIGS. 1A1 and 1B1 show the original fluorescence picture and 1A2, 1B2 schematic drawings of 1A1 and 1B1 respectively.

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